ACM MM 2013 Debrief
Oct 21 to Oct 25

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Nov 22, 2013
Barcelona, Spain
The city of Gaudi
Food in Barcelona
Big Picture of MM

- Acceptance
  - Full Paper: 47/235, 20%
  - Short Paper: 77/278, 27.7%
  - Open source software competition
  - Demos
  - 5 Grand Challenges

- Date
  - Oct. 21 to Oct. 25
Best Papers

- Best paper
  - “Wow! You Are So Beautiful Today!”
    Luoqi Liu, Hui Xu, Junliang Xing, Si Liu, Xi Zhou and Shuicheng Yan. NUS

- Best student paper
  - “Attributes-augmented Semantic Hierarchy for Image Retrieval”.
    Hanwang Zhang, Zheng-Jun Zha, Yang Yang, Shuicheng Yan, Yue Gao and Tat-Seng Chua. NUS
Wow! You Are So Beautiful Today?

- Hairstyle
- Makeup

Synthesize and Share!

Recommend
Wow! You Are So Beautiful Today?

**Beauty e-Experts Database**

- **Image Features**
  - Facial shape
  - Clothing color and texture
  - **Beauty-related Attributes**
    - Narrow Eyes
    - Thick lip
  - **Beauty Attributes**
    - Medium side part
    - Eye shadow
    - Lip gloss

**Recommendation Model**

- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- K
- L
- M
- N

**Recommendation Result**

- A: No.3 eye shadow template
- B: Long hair
- C: Curls

**Synthesis Module**

- **Hair template:**
  1. Alignment of face contour
  2. Blending between hair and testing image

- **Makeup templates:**
  1. Alignment of eye shadow template
  2. Skin smoothing
  3. Alpha blending

**Synthesized Result**
Wow! You Are So Beautiful Today?

- Download photos from a professional website with specific keywords
- Face detection and further manual selection
- 1,505 photos in total
Human annotation on beauty-related and beauty attributes
Wow! You Are So Beautiful Today?

- Probabilistic
- Energy function
Wow! You Are So Beautiful Today?

Figure 8: Visualization of one learned tree-structured super-graphs model.
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Recommendation Model

A: No.3 eye shadow template
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The exemplar recommendation

Synthesis Module

Hair template:
- 1. Alignment of face contour
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Makeup templates:
- 1. Alignment of eye shadow template
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Synthesized Result
Wow! You Are So Beautiful Today?

Beauty e-Experts Database

Image Features
- Facial shape
- Clothing color and texture

Beauty-related Attributes
- Narrow Eyes
- Thick lip

Beauty Attributes
- Medium side part
- Eye shadow
- Lip gloss

Recommendation Model

A-N: beauty and beauty-related attributes, e.g. eye shadow templates (A), hair length (B), hair shape (C), etc.

Recommendation Result

A: No.3 eye shadow template
B: Long hair
C: Curls

The exemplar recommendation

Synthesis Module

Hair template:
1. Alignment of face contour
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Makeup templates:
1. Alignment of eye shadow template
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Synthesized Result
Wow! You Are So Beautiful Today?
Thank you!

Safety is critical in an overseas trip!!!